

DATE:

Dan Bucks

Director

February 10, 2009

FROM:

Larry Finch, Operations Research

TO:

Senator Christine Kaufmann

SUBJECT:

Progressivity of Montana's Individual Income Tax

I have been asked to respond to your request for information regarding the progressivity of Montana's individual income tax. This memorandum provides a response to that request for information.

EXHIBIT.

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Beginning in tax year 2005, Senate Bill 407 (SB407), passed during the 2003 legislative session, significantly restructured Montana's individual income tax by:

- reducing the top marginal tax rate from 11% (applicable to taxable income in excess of \$80,300) to 6.9% (applicable to taxable income in excess of \$13,900);
- capping the previously unlimited itemized deduction for federal income tax paid during the tax year to \$5,000 (\$10,000 if married and filing a joint tax return); and
- implementing a new tax credit equal to 1% of net capital gains income (with this credit increasing to 2% of capital gains income beginning with tax year 2007).

The new capital gains tax credit effectively reduced the top marginal tax rate on capital gains income from 6.9% to 5.9% in tax years 2005 and 2006, and to 4.9% beginning in tax year 2007.

Taxes generally fall into one of three categories of fairness:

- Regressive tax as a share of income decreases as household income increases;
- Proportional tax as a share of income remains constant as household income increases: and
- Progressive tax as a share of income increases as income increases.

Montana's individual income tax has always been characterized as being progressive in nature, due in large part to the fact that the tax's marginal tax rates increase with taxable income.

Because SB407 acted to reduce the top marginal tax rate of Montana's individual income tax from 11% to 6.9%, and because the bill also provided for a new tax credit now equal to 2% of net capital gains income, and because capital gains income predominately flows to high income households, some have suggested that SB407 acted to reduce the progressivity of the tax. However, there has been no study that empirically examines whether this presumption is indeed true.

This paper uses a widely-used measure of tax progressivity and applies that measure to the three tax years immediately preceding implementation of SB407, and to the three years immediately following implementation of SB407 to determine precisely the change in progressivity of this tax over this time period.

The measure of progressivity used here is commonly referred to as the Suits Index, which was developed by Daniel Suits, and presented initially in 1977. The index has been used widely by many state revenue departments, the President's Office of Management and Budget, and the Congressional Budget Office.

Detailed specifics of how the index is calculated are left to the interested reader. In short, the index measures the accumulated percent of total taxes paid in relation to the accumulated percent of total household income across income brackets, and can vary in value from -1 to 1. If the index value is negative, the tax is regressive; if the index value is positive the tax is progressive. In either case, a larger absolute value of the index indicates a higher degree of regressivity or progressivity.

Changes in the progressivity of Montana's individual income tax just prior to and following the implementation of SB407 are shown and illustrated in the following table and chart.

Suits Index of Progressivity - Montana Individual Income Tax Before and After Senate Bill 407 Tax Years 2002 - 2007					
	Highest Marginal	Federal Income Tax	Capital Gains	Suits Progressivity Index	
Tax Year	Tax Rate	Deduction	Tax Credit	Before CG CR	After CG CR
Before	SB407				
2002	11%	Unlimited	n.a.	0.239	n.a.
2003	11%	Unlimited	n.a.	0.246	n.a.
2004	11%	Unlimited	n.a.	0.256	n.a.
After S	B407				
2005	6.90%	\$5K (\$10K, joint)	1%	0.233	0.225
2006	6.90%	\$5K (\$10K, joint)	1%	0.229	0.220
2007	6.90%	\$5K (\$10K, joint)	2%	0.216	0.199

¹ Suits, Daniel P., "Measurement of Tax Progressivity", *The American Economic Review*, Vol. 67, No. 4, September, 1977, pp. 747-752

Perhaps more importantly, whereas prior to SB407 the Suits index indicates that progressivity was increasing over time, following implementation of SB407 progressivity appears to be decreasing over time.

When the capital gains tax credit is taken into consideration, the drop in progressivity is even more pronounced with the Suits index measuring 0.225, 0.220, and 0.199 in tax years 2005, 2006, and 2007, respectively.

The impact that the capital gains tax credit alone has on progressivity can be gauged in a couple of ways. First, the impact can be gauged by comparing the Suits index before and after the credit is taken into consideration. For tax years 2005 and 2006, the capital gains tax credit acted to reduced the Suits index by 0.008 and 0.009. However, in tax year 2007, when the credit doubled from 1% to 2% of capital gains income, the credit acted to reduced the Suits index by 0.017, which is double the effect in the years when the credit was 1%. Increasing the capital gains tax credit from 1% to 2% acted to significantly decrease the progressivity of the individual income tax.

Overall, the Suits index decreased from a value of 0.256 in the year immediately preceding implementation of SB407 to 0.199 in tax year 2007, the first year under SB407 in which the capital gains tax credit equaled 2% of capital gains income. This represents a 22% overall reduction in progressivity over this time period, with about 70% of this reduction attributable to tax rate and other changes to the general tax structure, and 30% of this change attributable to implementation of the capital gains tax credit.

In summary:

- SB407 acted to significantly *reduce* the progressivity of Montana's individual income tax.
- Whereas prior to SB407 the progressivity of Montana's individual income tax appeared to be *increasing* over time, following implementation of SB407 the progressivity of Montana's individual income tax appears to be *decreasing* over time.
- Between tax year 2004 (the year immediately preceding implementation of SB407) and tax year 2007 (the first year in which the capital gains tax credit under SB407 reached 2%), the overall progressivity of Montana's individual income tax decreased by 22%, with 30% of this change attributable to the new capital gains tax credit, and the remaining 70% attributable to other features of SB407.

As the table shows, in the three years immediately preceding the implementation of SB407 (tax years 2002, 2003, and 2004), Montana's individual income tax was characterized by a top marginal tax rate of 11%, there was no limit on the amount of federal income tax deductible, and there was no capital gains tax credit. The last two columns of the table show the Suits progressivity index before the capital gains tax credit, and after the capital gains tax credit.

During this period, the state's individual income tax was relatively progressive, with the Suits index measuring 0.239, 0.246, and 0.256 in tax years 2002, 2003, and 2004, respectively.

Not only does the index suggest a relatively high degree of progressivity during this period, but progressivity was also *increasing* each year during this time frame.

SB407 reduced the top marginal tax rate to 6.9%, capped the deduction for federal income taxes paid during the tax year at \$5,000 (\$10,000 if married and filing a joint tax return), and provided a capital gains tax credit equal to 1% of capital gains income in tax years 2005 and 2006, with this credit increasing to 2% in tax year 2007.

As the table and chart show, the Suits index of progressivity was reduced significantly following passage of SB407, even before the new capital gains tax credit is taken into consideration. The index fell from 0.256 in the year immediately preceding implementation of SB407 (2004) to 0.233, 0.229, and 0.216 in tax years 2005, 2006, and 2007, respectively.

